

CLAIMS

What is claimed is:

- 5 1. A capsule encapsulating a cytochrome P450 producing cell, said capsule comprising a porous membrane which is permeable to cytochrome P450 produced by said cell.
2. The capsule according to Claim 1, wherein the capsule material comprises a complex formed from cellulose sulphate and polydimethyldiallylammonium.
3. The capsule according to Claim 1, wherein said cytochrome P450 producing cell comprises a vector selected from the group consisting of: pLX125 and pWAP.6.
- 10 4. The capsule according to Claim 1, wherein the cytochrome P450 producing cell is a packaging cell line comprising a retroviral vector carrying the cytochrome P450 gene, said packaging cell line harboring at least one retroviral or recombinant retroviral construct coding for the proteins for said retroviral vector to be packaged.
- 15 5. The capsule according to Claim 4, wherein the retroviral vector is replication-defective.
- 20 6. The capsule according to Claim 4, wherein the retroviral vector comprises a 5' LTR region of the structure U3-R-U5; one or more sequences selected from coding and non-coding sequences wherein at least one of the coding sequences codes for cytochrome P450; and a 3' LTR region comprising a completely or partially deleted U3 region wherein said deleted U3 region is replaced by a polylinker sequence, followed by the R and U5 region.

7. The capsule according to Claim 4, wherein the cytochrome P450 gene is under transcriptional control of a target cell specific regulatory element or promoter or an X-ray inducible promoter.

8. A pharmaceutical composition comprising the capsule according to Claim 1.

5 9. The capsule according to Claim 1 for use in the treatment of a cancer disease or any other relevant disease or disorder.

10. Use of the capsule to Claim 1 for producing a pharmaceutical composition useful for the ablation of tumour cells.

10 11. A method of treating a cancer disease or any other relevant disease or disorder comprising administering to a subject in need thereof a therapeutically effective amount of the capsule according to Claim 1 and, either simultaneously or with a time span, a prodrug which is activated by cytochrome P450.

15 12. The method according to Claim 11, wherein the capsule is administered by injection and/or by implantation into the target cells and/or at the site thereof, and the prodrug is administered systemically and/or locally.

13. The method according to Claim 11, wherein the target cells are cells of breast tumours and/or pancreatic tumours.

14. The method according to Claim 11, wherein the prodrug is cyclophosphamide and/or ifosfamide.

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B2

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C6